G. A.

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY	PCT				
To: HAMILTON SUNDSTRAND CORPORATION One Hamilton Road Attn. Stephenson, Gregory R. MS 1-1-BC18 Windsor Locks, CT 06096 UNITED STATES OF AMERICA JAN 20 Receive Hamilton Sund Intellectual Pro Department Color	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATION SEARCHING AUTHORITY, OR THE OPECLARATION FEB 0 5 2005 Porty Date of realing (PCT Rule 44.1) Date of realing (AV priority year) 14/01/2005				
Applicant's or agent's file reference H2726-EC	FOR FURTHER ACTION See paragraphs 1 and 4 below				
International application No. PCT/US2004/030941 Applicant	International filing date (day/month/year) 22/09/2004				
HAMILTON SUNDSTRAND CORPORATION					
1. X The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith. Filling of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46): When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet. Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Fascimile No.: (41–22) 740.14.35 For more detailed instructions, see the notes on the accompanying sheet. 2. The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith. With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that: the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices. no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.					
Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90 <i>bis</i> .1 and 90 <i>bis</i> .3, respectively, before the completion of the technical preparations for international publication. The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.					
Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.					
In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19 months. See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's Guide, Volume II, National Chapters and the WIPO Internet site.					
Name and mailing address of the International Searching Authority European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Bronac Murphy-Minehane				

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international politication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the International application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new:
- (iv) the claim replaces one or more claims as filed:
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- [Where originally there were 15 claims and after amendment of all claims there are 11]:
 "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
 "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- [Where various kinds of amendments are made]:
 "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	con Form POT/IOA/DOO				
H2726-EC	1	see Form PCT/ISA/220 Il as, where applicable, item 5 below.				
International application No.	International filing date (day/month/year)	(Earliest) Priority Date (day/month/year)				
PCT/US2004/030941	22/09/2004	22/09/2003				
Applicant						
HAMILTON SUNDSTRAND CORPOR	NOITAS					
This International Search Report has beer according to Article 18. A copy is being tra	n prepared by this International Searching Authorsmitted to the International Bureau.	nority and is transmitted to the applicant				
This International Search Report consists	of a total of sheets.					
X It is also accompanied by	a copy of each prior art document cited in this	report.				
Basis of the report a. With regard to the language, the is language in which it was filed, unle	ntemational search was carried out on the bas ess otherwise indicated under this item.	sis of the international application In the				
The international s this Authority (Rule	search was carried out on the basis of a translate 23.1(b)).	ation of the international application furnished to				
		in the international application, see Box No. I.				
2. Certain claims were foun	d unsearchable (See Box II).					
3. Unity of invention is lack	ing (see Box III).					
4. With regard to the title,						
X the text is approved as sub	mitted by the applicant.					
the text has been establish	ed by this Authority to read as follows:					
5. With regard to the abstract,						
the text is approved as subr	Titled by the applicant					
X the text has been established	ed, according to Rule 38 2(b), by this Authority	as it appears in Box No. IV. The applicant				
may, within one month from	the date of mailing of this international search	report, submit comments to this Authority.				
6. With regards to the drawings,						
a. the figure of the drawings to be published with the abstract is Figure No						
X as suggested by the						
	Authority, because the applicant failed to sugge	-				
b. none of the figures is to be p	Authority, because this figure better characterize published with the abstract.	zes the invention.				

International application No.

INTERNATIONAL SEARCH REPORT

PCT/US2004/030941

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

A mixer(16) includes a fresh air tube(40) defining a passage(42) having an inlet(44) receiving conditioned air(14) from an air conditioning pack(12). The fresh air tube(40) includes an outlet(46) providing mixed air(18) to a cabin(22)

of the aircraft. An outer tube (48) at least partially surrounds the fresh air tube (40) and receives recirculated air (26) from the cabin (22). Multiple holes (54) in the fresh air tube (40) fluidly connect the outer tube (48) to the fresh air tube (40). The warm recirculation air (26) surrounds the portion of the fresh air

tube (40) to heat it preventing ice from forming. The warm recirculation air (26) entering the fresh air tube (40) through the holes homogeneously mixes with the conditioned (14) air from the pack (12) to provide a uniform mixture of air within the fresh air tube (40), which further ensures the prevention of ice build up.

INTERNATIONAL SEARCH REPORT

International Application No PCT/US2004/030941

A CLASS	SIEICATION OF SUBJECT MATTER							
A. CLASS	SIFICATION OF SUBJECT MATTER B64D13/00 F24F13/04							
According	According to International Patent Classification (IPC) or to both national classification and IPC							
B. FIELDS	SSEARCHED							
Minimum d	documentation searched (classification system followed by class B64D F24F B01F	sification symbols)						
110.	D040 L541 0071							
Documenta	ation searched other than minimum documentation to the extent	t that such documents are included in the fields (
_	300000000000000000000000000000000000000	That Short decements are more as in the inches	searched					
Electronic o	data base consulted during the international search (name of da	lata hase and, where practical, search terms use						
1	nternal	AND DESIGN THE PARTY OF THE PAR	a)					
_								
	IENTS CONSIDERED TO BE RELEVANT							
Category °	Citation of document, with indication, where appropriate, of the	he relevant passages	Relevant to claim No.					
.,								
X	FR 2 599 437 A (ROY PHILIPPE) 4 December 1987 (1987-12-04)	,	1-3,5,6					
	abstract							
	page 1, lines 13-29 figures 1,2	!						
		1						
X	WO 01/11292 A (RESARO AB ; WEG (SE)) 15 February 2001 (2001-0	LER GEORGE	1-3,5,6					
]	page 19, lines 19-33	2-15)						
	figure 15							
Α	US 5 516 330 A (SCHERER THOMAS	DR ING ET	4,7-10					
	AL) 14 May 1996 (1996-05-14)	DI 2114	7,7 10					
1	column 9, lines 20-33 figure 2		1					
			ĺ					
	i	-/	l					
			I					
	ner documents are listed in the continuation of box C.	Patent family members are listed in	n annex.					
	regories of cited documents :	*T* tater document published after the inter- or priority date and not in conflict with the	the application but					
conside	nt defining the general state of the art which is not ered to be of particular relevance ocument but published on or after the international	cited to understand the principle or the invention	eory underlying the					
filing dat	ocument but published on or after the international ate It which may throw doubts on priority claim(s) or	"X" document of particular relevance; the cla cannot be considered novel or cannot be involve an inventive stop when the dec	be considered to					
which is citation o	s cited to establish the publication date of another or other special reason (as specified)	involve an inventive step when the doce "Y" document of particular relevance; the cla	cument is taken alone laimed invention					
"O" document other me	nt referring to an oral disclosure, use, exhibition or means	cannot be considered to involve an inve document is combined with one or mon ments, such combination being obvious	rentive step when the re other such docu-					
P' document	ant published prior to the international filing date but an the priority date claimed	in the art. *&* document member of the same patent fa	•					
	ctual completion of the international search	Date of mailing of the international search						
			77. tup					
	January 2005	14/01/2005						
Name and ma	alling address of the ISA European Patent Office, P.B. 5818 Patentlaan 2	Authorized officer						
	NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl.	Dadanaan V						
	Fax: (+31-70) 340-3016	Pedersen, K						

INTERNATIONAL SEARCH REPORT

International Application No PCT/US2004/030941

		PC1/US2004/030941
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 02/066324 A (UNITED TECHNOLOGIES CORP) 29 August 2002 (2002-08-29) page 7, lines 10,11 figure 2B	4,7-10
A	GB 671 567 A (GARRETT CORP) 7 May 1952 (1952-05-07) figure	8-10
A	US 5 634 964 A (ARMY JR DONALD E ET AL) 3 June 1997 (1997-06-03) column 2, lines 44-67 column 3, lines 25-53 figures 1,3,4	8-10
4	US 5 133 194 A (MCAULIFFE CHRISTOPHER ET AL) 28 July 1992 (1992-07-28) abstract; figures 1,4,5	8,10
		

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/US2004/030941

Patent document cited in search report		Publication date		Patent family member(s)		Publication date	
FR 2599437	Α	04-12-1987	FR	2599437 A1		04-12-1987	
WO 0111292	Α	15-02-2001	WO	0111292	A1	15-02-2001	
			AU	6375499	Α	05-03-2001	
US 5516330	Α	14-05-1996	DE	4335152	C1	20-04-1995	
			DE	59401392	D1	06-02-1997	
			EP	0648671	A1	19-04-1995	
			JP	3566353	B2	15-09-2004	
			JP	7156893	Α	20-06-1995	
			RU	2089791	C1	10-09-1997	
WO 02066324	A	29-08-2002	WO	02066324	A2	29-08-2002	
			US	2002162914		07-11-2002	
GB 671567	Α	07-05-1952	NONE				
US 5634964	A	03-06-1997	DE	69600726	D1	05-11-1998	
			DE		T2	27-05-1999	
			EP		A1	26-11-1997	
			ES		T3	01-01-1999	
			WO	9625329	A1	22-08-1996	
US 5133194	Α	28-07-1992	NONE				

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY PCT To: WRITTEN OPINION OF THE see form PCT/ISA/220 INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1) Date of mailing (day/month/year) see form PCT/ISA/210 (second sheet) Applicant's or agent's file reference FOR FURTHER ACTION see form PCT/ISA/220 See paragraph 2 below International application No. International filing date (day/month/year) Priority date (day/month/year) PCT/US2004/030941 22.09.2004 22.09.2003 International Patent Classification (IPC) or both national classification and IPC B64D13/00, F24F13/04 Applicant HAMILTON SUNDSTRAND CORPORATION This opinion contains indications relating to the following items: Box No. I Basis of the opinion Box No. II **Priority** ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability ☐ Box No. IV Lack of unity of invention Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement ☐ Box No. VI Certain documents cited ☑ Box No. VII Certain defects in the international application ☐ Box No. VIII Certain observations on the international application **FURTHER ACTION** If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notifed the International Bureau under Rule 66.1 bis(b) that written opinions of this International Searching Authority will not be so considered. If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date. whichever expires later. For further options, see Form PCT/ISA/220. 3. For further details, see notes to Form PCT/ISA/220. Name and mailing address of the ISA: **Authorized Officer**

Pedersen, K

Telephone No. +49 89 2399-2874

Form (PCT/ISA/237) (Cover Sheet) (January 2004)

European Patent Office

Fax: +49 89 2399 - 4465

Tel. +49 89 2399 - 0 Tx: 523656 epmu d

D-80298 Munich

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/030941

_	Box N	lo. I Basis of the opinion					
1.	 With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. 						
	This opinion has been established on the basis of a translation from the original language into the following language, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).						
2.	 With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of: 						
	a. type	e of material:					
		a sequence listing					
		table(s) related to the sequence listing					
	b. form	nat of material:					
		in written format					
		in computer readable form					
	c. time	of filing/furnishing:					
		contained in the international application as filed.					
		filed together with the international application in computer readable form.					
		furnished subsequently to this Authority for the purposes of search.					
3.	na co	addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto is been filed or furnished, the required statements that the information in the subsequent or additional pies is identical to that in the application as filed or does not go beyond the application as filed, as propriate, were furnished.					
4.	Additio	nal comments:					

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No. PCT/US2004/030941

_	Во	x No. II	Priority				
1. The following document has not been furnished:							
		\boxtimes	copy of the earlier	application	n whose p	priority has been claimed (Rule 43bis.1 and 66.7(a)).	
			translation of the	earlier app	lication wh	nose priority has been claimed (Rule 43 <i>bis</i> .1 and 66.7(b)).	
		Conse neverti	quently it has not be heless been establi	een possil shed on th	ole to cons ne assump	sider the validity of the priority claim. This opinion has tion that the relevant date is the claimed priority date.	
2.	2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43 <i>bis</i> .1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.						
3.	3. It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.						
4.	Add	litional c	bservations, if nece	essary:			
	Roy	No. V	Pageanad state	mont und	lor Bulo 4	Ohio 1/o\/i\ wikh wa mad An a a liha i i a a li	
			applicability; citati	ons and	explanatio	3bis.1(a)(i) with regard to novelty, inventive step or one supporting such statement	
1.	Stat	ement					
	Nov	elty (N)		Yes:	Claims	4,7-10	
		, ,		No:	Claims	1-3,5,6	
	Inventive step (IS)		Yes:	Claims	4,7-10		
			,	No:	Claims	1-3,5,6	
	Indu	strial ap	pplicability (IA)	Yes:	Claims	1-10	
				No:	Claims		
2.	Citat	tions an	d explanations				
			te sheet				
	n	Al- 377	O-main 1.	• - • • -			
	ROX	No. VII	Certain defects	in the int	ernational	application	

The following defects in the form or contents of the international application have been noted:

see separate sheet

Point V, 2

1. Numbering of cited documents (D):

D1: FR-A-2 599 437

D2: WO-A-01 11292

D3: US-A-5 516 330

D4: WO-A-02 066324

D5: GB-A-671 567

D6: US-A-5 634 964

D7: US-A-5 133 194

2. Independent claim 1:

2.1 D1 discloses

a mixer suitable for an aircraft air conditioning system (in the general terms of claim 1) comprising:

a first tube (1) having a passage extending between an inlet and an outlet; and

a second tube (2, 4) at least partially surrounding said first tube and forming a cavity (see Figure 1), said first tube having a hole fluidly connecting said first tube and said cavity (cf. p. 1, l. 15-16).

The subject-matter of claim 1 is therefore not new (Articles 33(1) and (2) PCT).

- 2.2 D2 also discloses a mixer on which the wording of claim 1 can be read (cf. Figure 15), the subject-matter of which is therefore also not new in view of D2 (Articles 33(1) and (2) PCT).
- 3. Dependent claims 2-7:
- 3.1 The additional features of claims 2, 3, 5 (see Point VIII below!) and 6 would also appear to be known from D1 and D2.
- 3.2 None of the cited documents disclose or provide any leads to the additional features of claim 4 and 7 in order to obtain a mixer which does not lead

recirculated air to the cockpit. D3 and D4 provide conditioned air to the flight deck by bypassing the mixer (in which conditioned and recirculated air is mixed) completely.

- 4. Independent claim 8:
- 4.1 In the wording of claim 8 the document D5 discloses:

An aircraft air conditioning system comprising:

a pack producing conditioned air (6, 7; cf. p. 2, I. 93-107);

a cabin (5) providing recirculation air;

a mixer fluidly connected between said pack and said cabin, said mixer including a fresh air tube (12) having a passage extending between an inlet fluidly connected to said pack (at 11) and an outlet (at 42) fluidly connected to said cabin;

an outer tube (13) at least partially arranged about at least a portion of said fresh air tube forming a cavity (in which partition 19 is located), said outer tube having a recirculation air inlet (at 24/24') connected to said cabin (through duct 15).

- 4.2 The subject-matter of claim 8 differs from this known system in further comprising a hole in said fresh air tube fluidly connecting said cavity and said passage (in D1, recirculated and fresh air is mixed at the inlet and/or the outlet of said passage) and is therefore new (Articles 33(1) and (2) PCT).
- 4.3 There are no indications in the cited prior art to the provision of this feature in order to obtain a compact air conditioning system with a smaller mixer that is not subject to ice build up while still producing a uniform mixed air outlet temperature:

D5 employs a valve arrangement (25) for selectively circulating hot recirculated air about and through the fresh air tube as well as a water trap (27) in order to avoid icing in the cold air duct. While D1 and D2 each discloses a mixer also comprising the distinguishing feature of claim 8, there are no indications in these documents that these mixers could result in the above-mentioned effects being obtained when employed in the system of D5. In particular, none of these documents mention or imply that an ice build up can be avoided. Consequently, no incentive exists for the skilled person to replace the mixer of D5 with the one of D1 or D2.

D6 and D7 both disclose aircraft air conditioning systems where the fresh and recirculated air merges at the outlet of a fresh air tube.

D3 and D4 merely disclose avoiding recirculated cabin air in the cockpit by bypassing the mixer completely, the latter not being described in detail.

The subject-matter of claim 8 therefore involves an inventive step (Articles 33(1) and (3) PCT).

- 5. Dependent claims 9 and 10:
- 5.1 Claims 9 and 10 are dependent on claim 8 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Point VII

- 1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D3 and D5 is not mentioned in the description, nor are these documents identified therein.
- 2. The features of the claims are not provided with reference signs placed in parentheses (Rule 6.2(b) PCT).

Point VIII

1. The additional features of claim 5 (and to a large extent those of claims 2 and 3) are not additional technical features of the mixer as such, but rather features relating to its use.